

In the Claims:

Please amend claims 25 - 37 and 39, as follows. A complete listing of pending claims is provided below.

1. (Original) A tissue treatment system, comprising:
an ablation probe having an ablative element and at least one perfusion exit port;
a source of ablation energy operably coupled to the ablative element;
a pump assembly operably coupled to the at least one perfusion exit port; and
a feedback device configured for controlling the amount of infusaid displaced by the pump assembly based on a sensed tissue parameter.
2. (Original) The tissue treatment system of claim 1, wherein the feedback device comprises a sensor configured for sensing the tissue parameter, and a perfusion controller coupled to the sensor and the pump assembly, the perfusion controller configured for controlling the pump assembly based on the sensed tissue parameter.
3. (Original) The tissue treatment system of claim 1, wherein the feedback device comprises a perfusion control valve associated with the distal end of the shaft, the perfusion control valve forming the at least one perfusion exit port, wherein the perfusion control valve changes the size of the at least one perfusion exit port based on the sensed tissue parameter.
4. (Original) The tissue treatment system of claim 1, wherein the ablation probe is rigid.

5. (Original) The tissue treatment system of claim 1, wherein the ablative element comprises at least one electrode.

6. (Original) The tissue treatment system of claim 5, wherein the at least one electrode is a single needle electrode.

7. (Original) The tissue treatment system of claim 5, wherein the at least one electrode comprises a needle electrode array.

8. (Original) The tissue treatment system of claim 1, wherein the source of ablation energy is a radio frequency generator.

9. (Original) The tissue treatment system of claim 1, wherein the pump assembly is external to the ablation probe.

10. (Original) The tissue treatment system of claim 1, wherein the pump assembly is carried by the ablation probe.

11. (Original) The tissue treatment system of claim 1, further comprising a source of infusaid, wherein the pump assembly is configured for pumping the infusaid from the infusaid source out through the at least one perfusion exit port.

12. (Original) The tissue treatment system of claim 1, wherein the tissue parameter is temperature.

13. (Original) The tissue treatment system of claim 1, wherein the tissue parameter is impedance.

14. (Original) The tissue treatment system of claim 1, wherein the ablative element is mechanically associated with the feedback device.

15. (Original) A method of treating tissue, comprising:

ablating the tissue;

sensing a parameter of the tissue; and

perfusing the tissue with an infusaid based on the sensed tissue parameter.

16. (Original) The method of claim 15, wherein the tissue is ablated using radio frequency energy.

17. (Original) The method of claim 15, wherein the tissue is perfused with the infusaid during the tissue ablation.

18. (Original) The method of claim 15, wherein the tissue parameter is temperature.

19. (Original) The method of claim 17, wherein the tissue perfusion is commenced when the sensed temperature surpasses a first temperature threshold.

20. (Original) The method of claim 19, wherein the tissue perfusion is ceased when the sensed temperature drops below a second temperature threshold.

21. (Original) The method of claim 15, wherein the tissue parameter is impedance.

22. (Original) The method of claim 21, wherein the tissue perfusion is commenced when the sensed impedance surpasses a first impedance threshold.

23. (Original) The method of claim 21, wherein the tissue perfusion is ceased when the sensed impedance drops below a second impedance threshold.

24. (Original) A tissue treatment system, comprising:
an ablation probe having an ablative element and at least one perfusion exit port;

a source of ablation energy operably coupled to the ablative element;
a pump assembly operably coupled to the at least one perfusion exit port;
a sensor configured for sensing a tissue parameter; and
a perfusion controller coupled to the sensor and the pump assembly, the
perfusion controller configured for controlling the pump assembly based on the
tissue parameter sensed by the sensor.

25. (Currently Amended) The tissue treatment system of claim θ 24,
wherein the ablation probe is rigid.

26. (Currently Amended) The tissue treatment system of claim θ 24,
wherein the ablative element comprises at least one electrode.

27. (Currently Amended) The tissue treatment system of claim θ 26,
wherein the at least one electrode is a single needle electrode.

28. (Currently Amended) The tissue treatment system of claim θ 26,
wherein the at least one electrode comprises a needle electrode array.

29. (Currently Amended) The tissue treatment system of claim θ 24,
wherein the at least one perfusion exit port comprises a plurality of side ports.

30. (Currently Amended) The tissue treatment system of claim θ 24,
wherein the at least one perfusion exit port is carried by the ablative element.

31. (Currently Amended) The tissue treatment system of claim θ 24,
wherein the source of ablation energy is a radio frequency generator.

32. (Currently Amended) The tissue treatment system of claim θ 24,
wherein the pump assembly is external to the ablation probe.

33. (Currently Amended) The tissue treatment system of claim θ 24, wherein the pump assembly is carried by the ablation probe.

34. (Currently Amended) The tissue treatment system of claim θ 24, further comprising a source of infusaid, wherein the pump assembly is configured for pumping the infusaid from the infusaid source out through the at least one perfusion exit port.

35. (Currently Amended) The tissue treatment system of claim θ 24, wherein the tissue parameter is temperature.

36. (Currently Amended) The tissue treatment system of claim θ 24, wherein the sensor is mechanically associated with the ablative element.

37. (Currently Amended) The tissue treatment system of claim θ 24, wherein the ablative element is the sensor.

38. (Original) The tissue treatment system of claim 35, wherein the perfusion controller is configured for commanding the pump assembly to pump infusaid through the at least one perfusion exit port when the tissue temperature is above a temperature threshold, and is configured for commanding the pump assembly to cease pumping infusaid through the at least one perfusion exit port when the tissue temperature is below the temperature threshold.

39. (Currently Amended) The tissue treatment system of claim θ 24, wherein the tissue parameter is impedance.

40. (Original) The tissue treatment system of claim 39, wherein the perfusion controller is configured for commanding the pump assembly to pump

infusaid through the at least one perfusion exit port when the tissue impedance is above an impedance threshold, and is configured for commanding the pump assembly to cease pumping infusaid through the at least one perfusion exit port when the tissue impedance is below the impedance threshold.

41 - 93 (Canceled)